AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-16. (CANCELED)

17. (CURRENTLY AMENDED) A hybrid fragment of tetanus toxin comprising a fragment C and ~~a fragment B or~~ a fraction of fragment B having ~~at least~~ 11 amino acid residues (amino acids 854-1315 of the tetanus toxin holotoxin), wherein the hybrid fragment is capable of transferring *in vivo* a protein, a peptide, or a polynucleotide through a neuromuscular junction and at least one synapse.

18. (CURRENTLY AMENDED) A hybrid fragment of tetanus toxin comprising a fragment C and ~~a fragment B or~~ a fraction of fragment B having ~~at least~~ 11 amino acid residues (amino acids 854-1315 of the tetanus toxin holotoxin) and a fraction of a fragment A devoid of its toxic activity corresponding to the proteolytic domain having a zinc-binding motif located in the central part of the chain between amino acids 225 and 245, wherein the hybrid fragment is capable of transferring *in vivo* a protein, a peptide or a polynucleotide through a neuromuscular junction and at least one synapse.

19-20. (CANCELED)

21. (PREVIOUSLY PRESENTED) A composition containing an active molecule in association with a hybrid fragment of tetanus toxin according to claim 17.

22. (CURRENTLY AMENDED) The composition according to claim 21, wherein the active molecule is selected from the group consisting of protein SMN (Survival Motor Neuron), BDNF (brain-derived neurotrophic factor), NT-3 (Neurotrophin-3), NT-4/5 (Neurotrophin 4/5), GDNF (Glial cell-line derived neurotrophic factor), IGF (Insulin-

like growth factor), PNI (protease nexin I), ~~SP13~~ SPI3 (Serine Protease Inhibitor protein), ICE (Interleukin -1 Converting Enzyme), Bcl-2, GFP (green fluorescent protein), endonucleases ~~like I-SceI or CRE~~, antibodies or drugs specifically directed against ~~neorodengenerative~~ neurodegenerative diseases ~~such as latero spinal amyotrophy (LSA)~~.

23. (PREVIOUSLY PRESENTED) The composition according to claim 21, wherein the active molecule is a polynucleotide encoding a protein.

24-33. (CANCELED)

34. (PREVIOUSLY PRESENTED) The composition according to claim 23, wherein the polynucleotide further comprises a promoter capable of expression in neurons.

35. (PREVIOUSLY PRESENTED) The composition according to claim 34, wherein the polynucleotide further comprises an enhancer.

36. (NEW) The composition according to claim 22, wherein the endonuclease is SceI or CRE.

37. (NEW) The composition according to claim 22, wherein the neurodegenerative disease is latero spinal amyotrophy (LSA).